

AMENDMENT TO THE CLAIMS

The following claims replace all prior versions.

1. (Currently amended) A method performed by an information handling system ("IHS"), the IHS including a computer having an input device, a display device, a processor, a computer-readable medium, and a network interface, at least the processor and the network interface comprising electronic circuitry components, for determining whether a financial transaction request is likely to be fraudulent, the method comprising:

the IHS receiving a first financial transaction request from a provider via the network interface;

using the processor, applying a plurality of rules to the first financial transaction request to activate a subset of the rules based on the information in the first financial transaction request, each of the plurality of rules having a predetermined weight;

using the processor, determining a first score by calculating a sum of the weights of the activated rules and applying a mathematical formula using the sum;

using the processor, determining a first indication of whether the first financial transaction request is likely to be fraudulent based on the first score;

using the network interface, transmitting the first indication to the provider to accept or deny the first financial transaction;

the IHS accessing an actual outcome of the first financial transaction request to determine a result indicating whether the first indication was correct based on the actual outcome; and

using the processor, automatically modifying the weight of at least one of the plurality of rules based on the result.

2. (Currently amended) The method of claim 1, and comprising: using the processor, adjusting the weight of at least one of the plurality of rules in response to a command from a user.

3. (Currently amended) The method of claim 1, and comprising:
receiving a second financial transaction request via the network interface; and
applying the plurality of rules to the second financial transaction request to determine a second score.
4. (Currently amended) The method of claim 1, wherein the IHS is a first IHS, and comprising: receiving the first financial transaction request from a second IHS, the second IHS including a computer having an input device, a display device, a processor, a computer-readable medium, and a network interface, at least the processor and the network interface comprising electronic circuitry components.
5. (Previously Presented) The method of claim 4, wherein receiving the first financial transaction request comprises: receiving the first financial transaction request from the second IHS through a global computer network.
6. (Previously Presented) The method of claim 5, and comprising: to the second IHS through the global computer network, outputting an indication of whether the first financial transaction request is likely fraudulent.
7. (Previously Presented) The method of claim 1, wherein the first financial transaction request includes information about a financial account that is associated with the first financial transaction request.
8. (Currently amended) The method of claim 1, wherein determining the first indication includes comparing the first score to a threshold using the processor.
9. (Previously Presented) The method of claim 1, wherein the plurality of rules include at least one positive rule that, if satisfied, indicates that a financial transaction request has an increased likelihood of being non-fraudulent.

10. (Previously Presented) The method of claim 1, wherein the plurality of rules include at least one negative rule that, if satisfied, indicates that a financial transaction request has a reduced likelihood of being non-fraudulent.

11. (Previously Presented) The method of claim 1, wherein the plurality of rules include: at least one positive rule that, if satisfied, indicates that a financial transaction request has an increased likelihood of being non-fraudulent; and at least one negative rule that, if satisfied, indicates that a financial transaction request has a reduced likelihood of being non-fraudulent.

12. (Previously Presented) The method of claim 11, wherein: a value of the at least one positive rule's weight is variable between zero and a number having a first +/- sign; and a value of the at least one negative rule's weight is variable between zero and a number having a second +/- sign opposite of the first +/- sign.

13. (Currently amended) A method performed by an information handling system ("IHS"), the IHS including a computer having an input device, a display device, a processor, a computer-readable medium, and a network interface, at least the processor and the network interface comprising electronic circuitry components, for determining whether a financial transaction request is likely to be fraudulent, the method comprising:

using the processor, determining a first score for a first financial transaction request by applying a plurality of rules to the first financial transaction request to activate a subset of the rules based on the information in the first financial transaction request, each of the plurality of rules having a predetermined weight, the first score determined by calculating a sum of the weights of the activated rules and applying a mathematical formula using the sum;

using the processor, determining whether the first financial transaction request is actually fraudulent; and

in response to determining whether the first financial transaction request is actually fraudulent, using the processor to automatically adjust ~~adjusting~~ the weight of at least one of the plurality of rules for determining whether a second financial transaction request is likely fraudulent.

14. (Currently amended) The method of claim 13, and comprising:
the IHS outputting a first indication of whether the first financial transaction request is likely to be fraudulent based on the first score.
15. (Currently amended) The method of claim 13, and comprising:
using the processor, determining a second score for the second financial transaction request by applying the plurality of rules to the second financial transaction request;
using the processor, determining whether the second financial transaction request is actually fraudulent; and
in response to determining whether the second financial transaction request is actually fraudulent, using the processor to automatically adjust ~~adjusting~~ the weight of at least one of the plurality of rules for determining whether a third financial transaction request is likely fraudulent.
16. (Currently amended) The method of claim 13, wherein the IHS is a first IHS, and comprising: receiving the second financial transaction request from a second IHS, the second IHS including a computer having an input device, a display device, a processor, a computer-readable medium, and a network interface, at least the processor and the network interface comprising electronic circuitry components.
17. (Original) The method of claim 16, wherein receiving the second financial transaction request comprises: receiving the second financial transaction request from the second IHS through a global computer network.
18. (Original) The method of claim 17, and comprising: to the second IHS through the global computer network, outputting an indication of whether the second financial transaction request is likely fraudulent.
19. (Original) The method of claim 13, wherein the first financial transaction request is actually non-fraudulent.

20. (Original) The method of claim 13, wherein the first financial transaction request is actually fraudulent.
21. (Original) The method of claim 13, wherein the first financial transaction request includes information about a financial account that is associated with the first financial transaction request.
22. (Currently amended) The method of claim 13, and comprising: adjusting the weight of at least one of the plurality of rules in response to a command from a user transmitted via the input device.
23. (Currently amended) The method of claim 13, wherein using the processor to automatically adjust ~~adjusting~~ the weight of at least one of the plurality of rules comprises: using the processor to automatically adjust ~~adjusting~~ the weight of at least one of the plurality of rules to improve a predictive accuracy of the plurality of rules.
24. (Currently amended) The method of claim 13, wherein using the processor to automatically adjust ~~adjusting~~ the weight of at least one of the plurality of rules comprises: using the processor to automatically adjust ~~adjusting~~ the weight of at least one of the plurality of rules in response to a gradient descent algorithm.
25. (Currently amended) The method of claim 15, and comprising:
in response to determining whether the first financial transaction request is actually fraudulent, using the processor to adjust ~~adjusting~~ a threshold applying the threshold to the second score for determining whether the second financial transaction request is likely fraudulent.
26. (Previously Presented) The method of claim 13, wherein the first financial transaction request is associated with a first customer and the second financial transaction request is associated with a second customer.

27. (Currently amended) The method of claim 13, and comprising: in response to determining whether the first financial transaction request is actually fraudulent, storing an actual result for the first financial transaction request and the first financial transaction request to a valid transaction database on the computer-readable medium.

28. (Currently amended) The method of claim 13, and comprising: in response to determining whether the first financial transaction request is actually fraudulent, storing an actual result for the first financial transaction request and the first financial transaction request to an invalid transaction database on the computer-readable medium.

29-32. (Canceled)

33. (Previously Presented) A system, comprising:
an information handling system ("IHS") for
 receiving a first financial transaction request;
 determining whether the financial transaction request is likely fraudulent by
 applying a plurality of rules to the financial transaction request to activate a subset of the
 rules based on the information in the first financial transaction request, each of the
 plurality of rules having a predetermined weight, and generating a first score by
 calculating a sum of the weights of the activated rules and applying a mathematical
 formula using the sum; and
 automatically adjusting the weight of at least one of the plurality of rules based on
 an actual outcome of the financial transaction request.

34. (Previously Presented) The system of claim 33, wherein the IHS is for adjusting the weight of at least one of the plurality of rules in response to a command from a user.

35. (Previously Presented) The system of claim 33, wherein determining whether the financial transaction request is likely fraudulent includes determining a score for the financial transaction request and outputting an indication of whether the financial transaction request is likely to be fraudulent based on the score.

36. (Original) The system of claim 33, wherein the IHS is a first IHS, and wherein the first IHS is for receiving the financial transaction request from a second IHS.

37. (Original) The system of claim 36, wherein the first IHS is for receiving the financial transaction request from the second IHS through a global computer network.

38. (Original) The system of claim 37, wherein the first IHS is for: to the second IHS through the global computer network, outputting an indication of whether the financial transaction request is likely fraudulent.

39. (Original) The system of claim 33, wherein the financial transaction request includes information about a financial account that is associated with the financial transaction request.

40. (Previously Presented) The system of claim 33, wherein the IHS is for: storing the actual outcome and the financial transaction request to at least one of a valid transaction database and an invalid transaction database.

41. (Previously Presented) The system of claim 33, wherein the plurality of rules include at least one positive rule that, if satisfied, indicates that a financial transaction request has an increased likelihood of being non-fraudulent.

42. (Previously Presented) The system of claim 33, wherein the plurality of rules include at least one negative rule that, if satisfied, indicates that a financial transaction request has a reduced likelihood of being non-fraudulent.

43. (Previously Presented) The system of claim 33, wherein the plurality of rules include: at least one positive rule that, if satisfied, indicates that a financial transaction request has an increased likelihood of being non-fraudulent; and at least one negative rule that, if satisfied, indicates that a financial transaction request has a reduced likelihood of being non-fraudulent.

44. (Previously Presented) The system of claim 43, wherein: a value of the at least one positive rule's weight is variable between zero and a number having a first +/- sign; and a value

of the at least one negative rule's weight is variable between zero and a number having a second +/- sign opposite of the first +/- sign.

45. (Previously Presented) A system, comprising:
an information handling system ("IHS") for:

determining whether a first financial transaction request is likely to be fraudulent by applying a plurality of rules to the first financial transaction request to activate a subset of the rules based on the information in the first financial transaction request, each of the plurality of rules having a predetermined weight, and generating a first score by calculating a sum of the weights of the activated rules and applying a mathematical formula using the sum;

determining whether the first financial transaction request is actually fraudulent;
and,

in response to determining whether the first financial transaction request is actually fraudulent, adjusting the weight of at least one of the plurality of rules for determining whether a second financial transaction request is likely fraudulent.

46. (Previously Presented) The system of claim 45, wherein the IHS is for: determining whether the second financial transaction request is likely fraudulent by applying the plurality of rules to the second financial transaction request.

47. (Previously Presented) The system of claim 46, wherein the IHS is for: in response to determining whether the second financial transaction request is actually fraudulent, adjusting the weight of at least one of the plurality of rules for determining whether a third financial transaction request is likely fraudulent.

48. (Original) The system of claim 46, wherein the IHS is a first IHS, and wherein the first IHS is for receiving the second financial transaction request from a second IHS.

49. (Original) The system of claim 48, wherein the first IHS is for receiving the second financial transaction request from the second IHS through a global computer network.

50. (Original) The system of claim 49, wherein the first IHS is for: to the second IHS through the global computer network, outputting an indication of whether the second financial transaction request is likely fraudulent.

51. (Original) The system of claim 45, wherein the first financial transaction request is actually non-fraudulent.

52. (Original) The system of claim 45, wherein the first financial transaction request is actually fraudulent.

53. (Original) The system of claim 45, wherein the first financial transaction request includes information about a financial account that is associated with the first financial transaction request.

54. (Previously Presented) The system of claim 45, wherein the IHS is for adjusting the weight of at least one of the plurality of rules in response to a command from a user.

55. (Previously Presented) The system of claim 45, wherein the IHS is for adjusting the weight of at least one of the plurality of rules to improve a predictive accuracy of the weights.

56. (Previously Presented) The system of claim 45, wherein the IHS is for adjusting the weight of at least one of the plurality of rules to improve the predictive accuracy of the weights by adjusting the weights in response to a gradient descent algorithm.

57. (Previously Presented) The system of claim 45 wherein the IHS is for: in response to determining whether the first financial transaction request is actually fraudulent, adjusting a threshold, determining a score that indicates whether the second financial transaction request is likely fraudulent, and applying the threshold to the score for determining whether the second financial transaction request is likely fraudulent.

58. (Previously Presented) The system of claim 45, wherein the plurality of rules includes at least one of a positive rule that, if satisfied, indicates that a financial transaction request has an

increased likelihood of being non-fraudulent and a negative that, if satisfied, indicates that a financial transaction request has a reduced likelihood of being non-fraudulent.

59. (Previously Presented) The system of claim 45, wherein the IHS is for: storing an actual result of the first financial transaction request and the first financial transaction request in a valid transaction database.

60. (Previously Presented) The system of claim 45, wherein the IHS is for: storing an actual result of the first financial transaction request and the first financial transaction request in an invalid transaction database.

61-96. (Canceled)

97. (Currently amended) A method performed by an information handling system including a computer processor, an input device, a display device, a processing device, a computer-readable medium, and a network interface device, the method for determining whether a financial transaction request is likely to be fraudulent, the method comprising:

the processing device automatically adjusting a predetermined weight of at least one of a plurality of rules based on an indication of whether a previous financial transaction request is likely to be fraudulent as determined based on a score and an actual outcome of the previous financial transaction request, the score of the previous financial transaction request being generated by applying a plurality of rules to the previous financial transaction to activate a subset of the rules based on the information in the previous financial transaction and calculating a sum of the predetermined weights of the activated rules and applying a mathematical formula using the sum.

98. (Currently amended) The method of claim 97, further comprising applying the plurality of rules to a subsequent financial transaction request using the processing device.

99. (Currently amended) The method of claim 97, further comprising determining a first score for the previous financial transaction request by applying the plurality of rules to the previous financial transaction request using the processing device.

100. (Currently amended) The method of claim 99, further comprising determining the indication of whether the previous financial transaction request is likely to be fraudulent by applying a first threshold to the first score using the processing device.

101. (Currently amended) The method of claim 100, further comprising automatically adjusting the threshold based on whether the indication was correct using the processing device.

102. (Currently amended) The method of claim 97, further comprising storing the actual outcome and the previous financial transaction to a valid transaction database on the computer-readable medium if the indication was correct.

103. (Currently amended) The method of claim 97, further comprising storing the first actual outcome and the financial transaction to an invalid transaction database on the computer-readable medium if the indication was incorrect.

104. (Currently amended) The method of claim 97, further comprising adjusting the weight of at least one of the plurality of rules in response to a command received from a user using the input device.

105. (Previously Presented) The method of claim 97, wherein the previous financial transaction request includes financial account information.

106. (Previously Presented) The method of claim 105, wherein the financial account information includes at least one of account holder information, account number information, account expiration information, and account billing address information.

107. (Previously Presented) The method of claim 97, wherein the previous financial transaction request includes transaction information.

108. (Previously Presented) The method of claim 107, wherein the transaction information includes at least one of transaction shipping information and transaction type information.

109. (Previously Presented) The method of claim 107, wherein the transaction information includes Internet Protocol address information.

110. (Previously Presented) The method of claim 109, wherein the Internet Protocol address information includes an Internet Protocol address associated with a customer.

111. (Currently amended) The method of claim 97, wherein the processing device automatically adjusting the weight of at least one of the plurality of rules includes the processing device automatically adjusting the weight of at least one of the plurality of rules based on a gradient descent algorithm.

112. (Currently amended) The method of claim 97, wherein the processing device automatically adjusting the weight of at least one of the plurality of rules includes the processing device automatically modifying the weight of at least one of the plurality of rules in approximately real-time based on when the actual outcome of the previous financial transaction request is available.

113. (Previously Presented) The method of claim 97, wherein each of the plurality of rules is associated with a first number representing a number of past, actual fraudulent transaction requests satisfying the rule.

114. (Currently amended) The method of claim 113, wherein modifying the weight of at least one of the plurality of rules includes the processing device increasing the weight of one of the plurality of rules that is associated with a larger first number than other rules included in the plurality of rules.

115. (Previously Presented) The method of claim 97, wherein each of the plurality of rules is associated with a second number representing a number of past, actual non-fraudulent financial transaction requests satisfying the rule.

116. (Currently amended) The method of claim 115, wherein modifying the weight of at least one of the plurality of rules includes the processing device increasing the weight of one of the plurality of rules that is associated with a larger second number than other rules included in the plurality of rules.